



**Governor's STEM Advisory Council
Executive Committee
May 23, 2013
10:30 a.m. to 12:30 p.m.**

PRESENT ON SITE:

Lt. Governor Kim Reynolds, co-chair
UNI President Ben Allen, co-chair
Barry Butler (proxy for Sally Mason)
John Carver, member
Rob Denson, member
Jason Glass, member
Michelle Gowdy (proxy for Paul Schickler III)
Raynard Kington, member
Brad Woody, member
Gail Wortmann, member
Jeff Weld, Executive Director
Mary Andringa, incoming Co-Chair
Jordan Cohen, STEM Council
Deb Dunkhase, STEM Council
Craig Johnson, STEM Council
Gary Scholten, STEM Council
Janet McMahill, SC Hub PI
Lynne Campbell, NC Manager
James Hoelscher, NE Manager
Kris Kilibarda, SC Manager
Beth Kulow, SW Manager
Rebecca Whitaker, SE Manager
Sarah Derry, SC Hub staff
Brenda Buzynski, UNI President's Office
Linda Fandel, Governor's Office
Kari Jastorff, Council Admin.
Greta Johnson, Lt. Governor's Office
Tonja Richards, Council Admin.
Becky Wilhovsky, Council Admin.
Loren Thalacker, student staff
Amy Kuhler, Connect Iowa (guest)
Duane Magee, Executive Director, Iowa Board of Educational Examiners (guest)
Elliott Smith, Iowa Business Council (guest)
Jay Staker, ISU Extension (guest)

DIAL IN ATTENDEES:

Teresa Wahlert, member
Kari Webb, NW Manager
Jonathan Wickert (proxy for Stephen Leath)

AGENDA

Welcome:

President Allen opened the meeting by acknowledging great turn-out symbolic of the importance and momentum of our work together. He observed the many challenges and opportunities that lie ahead, especially the deeper challenge of integrating the work of the Council with established institutions and structures of the state for assured long-term sustainability.

Legislative update: STEM is funded for FY 2014 at the level of last year (\$4.7M) plus an additional \$500,000 for the establishment of an information technology certification program across Iowa. Lt. Governor Reynolds expressed deep appreciation to the 2013 legislature for their continued support of STEM.

Announcements:

- John Deere Foundation has invested \$100,000 in the STEM initiative's Real World Externships program to fund teacher placements at Deere facilities in summer 2013 and 2014.
- The National Science Foundation has invested \$1.2M in a 3 year plan to develop an evaluation model for State STEM in Iowa, to be disseminated to other states. Weld is PI on the grant, a collaboration of UNI's Center for Social and Behavioral Research, UI's Center for Educational Assessment, and ISU's Research Institute for Studies in Education. (HANDOUT)
- Scale-Up 2013-14: The STEM Network's regional managers (and their regional boards) have done a great job of setting the table for another round of scale-up with nine service providers. Over 900 applications, many bringing multiple classrooms or clubs, will be funded for 2013-14. Conservatively some 87,904 youth will participate, with the likelihood of well over 100,000 considering one of the scale-up programs will be adopted region-wide by four of six regions due to cost-effectiveness of regional licensing versus singular applicant funding. That's 2.7 times the impact of 2012-13 on the same dollars. *[An estimated 138 applicants were denied, equating to a shortage of \$859,558 if we were to meet demand. That is not to say all applications are worthy.]*
- Kaizen. Mary Andringa has volunteered her lean operations experts to help the STEM network team to identify and work through "pain points" in the scale-up process. The kaizen will be held at Vermeer in Pella on July 2 and 3. Contact Jeff Weld if you're interested.
- Iowa Association of Independent Colleges and Universities is working on establishing a STEM network to support the Council's efforts, announced Kris Kilibarda, who is working with Central College President Mark Putnam to identify STEM leads at each institution.
- Kris Kilibarda announced to the executive committee that her one-year leave of absence from Central College to serve as South Central Regional STEM Manager has come to a close and she will be returning to Central. She assured the committee that she will continue to serve STEM in a variety of ways. Her efforts were commended and applauded. Janet McMahon, Education Dean at Drake University, informed the committee of their launched search for Kris' replacement and of Drakes' unwavering and proud commitment to the Hub role for SC Iowa.
- Iowa STEM Film Festival winners were shown. Some 150 Iowans convened at the Science Center of Iowa on May 5 for the first annual (?) Festival sponsored by Google and several scale-up service providers. Up to 10,000 Iowans viewed the films on-line during the month-long voting window. The Iowa Children's Museum is showcasing one of the winners; others are being pitched as PSAs to media outlets. All winning films are viewable at <http://www.iowastem.gov/2013-iowa-student-stem-film-fest-award-winners>

1. Innovation Proposals for 2013-14 and Beyond

- Executive Committee member John Carver chairs the **Broadband** task force for the Council. The issue is "...a matter of economic imperative, of quality of life" and has upon digging become a "pandora's box" with multiple interests and angles. The team proposes a strategic statewide Broadband plan be developed in time for introducing legislation in the 2014 session that will "create financial incentives for providers to build out to underserved areas." The question left to the executive committee is, what body or organization is best positioned to champion this cause? Is it the STEM Council, the Innovation Council, Economic Development? Other? That determination needs to be made by the July 11 meeting of this group. Council member Gary Scholten recommended, for context to this important task, the book "The New Digital Age: re-shaping the future of people, nations, and business" by Google's Eric Schmidt and Jared Cohen. [HANDOUT]
- SC Regional Manager Kris Kilibarda chairs the STEM Endorsement task force for the Council, working jointly with the Board of Educational Examiners. Teacher licensure rules have been drafted by the team to support five plans in one: a K-8 and a 5-8 STEM teaching endorsement that can be added to currently licenses; a K-12 STEM Specialist/Coach; a Career-Technical license in the area of Engineering; and a 5-12 engineering endorsement for licensed teachers. The BOEE has had an initial reading. Higher education institutions are currently reviewing. Results will be shared with the STEM Council this fall. Drake, it was pointed out by Dean McMahon, envisions building toward this model upon the current STEM elementary specialist program created in partnership with DMACC. The Council may want to consider financially supporting pilot programs in 2014-15. [HANDOUT]
- NW Regional Manager Kari Webb chairs the STEM Schools/Classrooms task force for the Council. The team's vision for STEM schools is that they possess redesigned learning environments, integrated STEM curriculum, and community based partnerships. To promote them will require financial support and the establishment of a community forum and repository. The team recommends an rfp process to incentivize the spread of STEM Classrooms. Executive Committee members noted that the Equella system being developed by the Dept. of Ed. and the Agora System (related) within the AEAs may be able to provide the web-based functions of STEM Schools. The UI's T.I.L.E. classroom model is implemented via professional development of users, which was offered up to the Council for this purpose by Provost Butler. The executive committee will be asked for approval to go forward with this on July 11. [HANDOUT]
- STEM Council member Deb Dunkhase chairs the Active Learning Community Partners (formerly known as informal) innovation team. Their proposal is to develop a contributory network to Iowa's STEM challenge by connecting the state's out-of-school assets. Some 60 attendees are joining a June retreat to lay the groundwork to plans. A coordinator position is being proposed to the Noyce Foundation; a web-platform is being envisioned (again, possibly an approach to the Equella structure); and a major fall conference to bind the ties. The executive committee will be asked for approval to go forward with this on July 11. [HANDOUT]

- NC Regional Manager Lynne Campbell chairs the STEM Professional Development task force charged with developing a model for how STEM PD can be delivered to all Iowa educators. Her team has generated a vision, a mission, and criteria for what STEM professional development needs to look like, including the pedagogical, content, and learning community aspects. Next step will be to determine how best to foster the identification, growth, and wide scale implementation of exemplary PD that abides by the team's vision. Alignment to and timing with the potential adoption of the Next Generation Science Standards (steeped in STEM) is ideal. Director Glass advised executive committee members of the need for the Standards and our important role in advocating for their adoption. Through June the team will craft a model for identification, growth, and wide scale implementation with an eye toward presenting to the executive committee on July 11. [HANDOUT]

2. Budget Status

The Council's administrative office is working with the Governor's office on a template for real-time reporting on budget categories of the STEM appropriation. It is expected to be delivered to the Executive Committee on July 11. In the meantime, FY 2013 budget status was presented in overview by E.D. Weld, essentially clarifying for the committee that each category of the FY 2013 budget is expended or encumbered at this time. In the case of Project Lead The Way, Iowa-Teach Math & Science, and STEM staffing at the universities, each is under cost-reimbursable contracts that show encumbered but await final invoicing to know for sure. Residual funds from under-spent Iowa Testing are being redistributed to regional hubs in support of scale-up programming for 2012-13. [HANDOUT]

3. Closing Comments

President Allen closed the meeting by acknowledging that this is his final meeting in this role. He advised the committee that his successor, Mary Andringa, brings a wealth of knowledge and experience that will strengthen our efforts even more. He gained as much as he gave by serving alongside the Lt. Governor, and wishes us all well in building on the great foundation. Lt. Governor Reynolds considered the work of the Council to be extending throughout the broader community of education and business in our state and that such growth in mission and partnership is a very important venture. She expressed heartfelt gratitude to President Allen for his many contributions to the success of Iowa's STEM initiative.

ADJOURNED: 12:35PM

NEXT MEETING: July 11, 10:00-12:00

Compiled by Jeff Weld